

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 09/396,539D
Source: IFW16
Date Processed by STIC: 1/4/05

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 01/06/2005

PATENT APPLICATION: US/09/396,539D

TIME: 11:46:18

Input Set : N:\Cr4\01042005\I396539D.raw

Output Set: N:\CRF4\01052005\I396539D.raw

```

1 <110> APPLICANT: Palese, Peter
2   Garcia-Sastre, Adolfo
3 <120> TITLE OF INVENTION: RECOMBINANT NEGATIVE STRAND RNA VIRUS
4   EXPRESSION SYSTEMS AND VACCINES
5 <130> FILE REFERENCE: 26-003700US
C--> 6 <140> CURRENT APPLICATION NUMBER: US/09/396,539D
7 <141> CURRENT FILING DATE: 1999-09-14
8 <150> PRIOR APPLICATION NUMBER: 09/106,377
9 <151> PRIOR FILING DATE: 1998-06-29
10 <150> PRIOR APPLICATION NUMBER: 08/252,508
11 <151> PRIOR FILING DATE: 1994-06-01
12 <160> NUMBER OF SEQ ID NOS: 63
13 <170> SOFTWARE: FastSEQ for Windows Version 4.0
15 <210> SEQ ID NO: 1
16 <211> LENGTH: 21
17 <212> TYPE: DNA
18 <213> ORGANISM: Artificial Sequence
19 <220> FEATURE:
20 <223> OTHER INFORMATION: Primer for rescue of the mutant NA gene into virus particles
21 <400> SEQUENCE: 1
22   tacgaggaaa tggttcctgtt a                               21
24 <210> SEQ ID NO: 2
25 <211> LENGTH: 19
26 <212> TYPE: PRT
27 <213> ORGANISM: Influenza virus
28 <400> SEQUENCE: 2
29   Gln Leu Val Trp Met Ala Cys Asn Ser Ala Ala Phe Glu Asp Leu Arg
30   1           5           10           15
31   Val Leu Ser
33 <210> SEQ ID NO: 3
34 <211> LENGTH: 16
35 <212> TYPE: PRT
36 <213> ORGANISM: Influenza virus
37 <220> FEATURE:
38 <223> OTHER INFORMATION: epitope within the NP protein
39 <400> SEQUENCE: 3
40   Thr Tyr Gln Arg Thr Arg Gln Leu Val Arg Leu Thr Gly Met Asp Pro
41   1           5           10           15
43 <210> SEQ ID NO: 4
44 <211> LENGTH: 95
45 <212> TYPE: DNA
46 <213> ORGANISM: Artificial Sequence
47 <220> FEATURE:

```

RAW SEQUENCE LISTING

DATE: 01/06/2005

PATENT APPLICATION: US/09/396,539D

TIME: 11:46:18

Input Set : N:\CrF4\01042005\I396539D.raw

Output Set: N:\CRF4\01052005\I396539D.raw

```

48 <223> OTHER INFORMATION: Primer for construction of plasmid pV-wt
49 <400> SEQUENCE: 4
50     gaagcttaat acgactcact ataagtagaa acaagggtgt tttttcatat catttaaact 60
51     tcaccctgct tttgctgaat tcattcttct gcagg                               95
53 <210> SEQ ID NO: 5
54 <211> LENGTH: 95
55 <212> TYPE: DNA
56 <213> ORGANISM: Artificial Sequence
57 <220> FEATURE:
58 <223> OTHER INFORMATION: Primer for construction of plasmid pM-wt
59 <400> SEQUENCE: 5
60     gaagcttaat acgactcact ataagcaaaa gcagggtgaa gtttaaataa tatgaaaaaa 60
61     cacccttggt tctactgaat tcattcttct gcagg                               95
63 <210> SEQ ID NO: 6
64 <211> LENGTH: 68
65 <212> TYPE: DNA
66 <213> ORGANISM: Artificial Sequence
67 <220> FEATURE:
68 <223> OTHER INFORMATION: Primer for construction of plasmid pV-d5'
69 <400> SEQUENCE: 6
70     agcttaatac gactcactat aagatctatt aaacttcacc ctgcttttgc tgaattcatt 60
71     cttctgca                                           68
73 <210> SEQ ID NO: 7
74 <211> LENGTH: 60
75 <212> TYPE: DNA
76 <213> ORGANISM: Artificial Sequence
77 <220> FEATURE:
78 <223> OTHER INFORMATION: Primer for construction of plasmid pV-d5'
79 <400> SEQUENCE: 7
80     gaagaatgaa ttcagcaaaa gcagggtgaa gtttaataga tcttatagtg agtcgtatta 60
82 <210> SEQ ID NO: 8
83 <211> LENGTH: 42
84 <212> TYPE: DNA
85 <213> ORGANISM: Artificial Sequence
86 <220> FEATURE:
87 <223> OTHER INFORMATION: Primer for construction of plasmid pHgaNS
88 <400> SEQUENCE: 8
89     ccgaattctt aatacgactc actataagta gaaacaaggg tg                               42
91 <210> SEQ ID NO: 9
92 <211> LENGTH: 30
93 <212> TYPE: DNA
94 <213> ORGANISM: Artificial Sequence
95 <220> FEATURE:
96 <223> OTHER INFORMATION: Primer for construction of plasmid pHgaNS
97 <400> SEQUENCE: 9
98     cctctagacg ctcgagagca aaagcagggtg                               30
100 <210> SEQ ID NO: 10
101 <211> LENGTH: 15
102 <212> TYPE: RNA

```

RAW SEQUENCE LISTING

DATE: 01/06/2005

PATENT APPLICATION: US/09/396,539D

TIME: 11:46:18

Input Set : N:\Crf4\01042005\I396539D.raw

Output Set: N:\CRF4\01052005\I396539D.raw

```

103 <213> ORGANISM: Artificial Sequence
104 <220> FEATURE:
105 <223> OTHER INFORMATION: Primer for construction of plasmid pHgaNS
106 <400> SEQUENCE: 10
107      caccugcuu uugcu                                     15
109 <210> SEQ ID NO: 11
110 <211> LENGTH: 15
111 <212> TYPE: RNA
112 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Primer for generating point mutations in promoter sequence
115 <400> SEQUENCE: 11
116      caccugcuu uuacu                                     15
118 <210> SEQ ID NO: 12
119 <211> LENGTH: 15
120 <212> TYPE: RNA
121 <213> ORGANISM: Artificial Sequence
122 <220> FEATURE:
123 <223> OTHER INFORMATION: Primer for generating point mutations in promoter sequence
124 <400> SEQUENCE: 12
125      caccugcuu cugcu                                     15
127 <210> SEQ ID NO: 13
128 <211> LENGTH: 15
129 <212> TYPE: RNA
130 <213> ORGANISM: Artificial Sequence
131 <220> FEATURE:
132 <223> OTHER INFORMATION: Primer for generating point mutations in promoter sequence
133 <400> SEQUENCE: 13
134      caccuguuu cugcu                                     15
136 <210> SEQ ID NO: 14
137 <211> LENGTH: 16
138 <212> TYPE: RNA
139 <213> ORGANISM: Artificial Sequence
140 <220> FEATURE:
141 <223> OTHER INFORMATION: Primer for generating point mutations in promoter sequence
142 <400> SEQUENCE: 14
143      caccuugcu uuugcu                                    16
145 <210> SEQ ID NO: 15
146 <211> LENGTH: 15
147 <212> TYPE: RNA
148 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: Primer for generating point mutations in promoter sequence
151 <400> SEQUENCE: 15
152      caccuguuu uuacu                                     15
154 <210> SEQ ID NO: 16
155 <211> LENGTH: 15
156 <212> TYPE: RNA
157 <213> ORGANISM: Artificial Sequence

```

RAW SEQUENCE LISTING

DATE: 01/06/2005

PATENT APPLICATION: US/09/396,539D

TIME: 11:46:18

Input Set : N:\CrF4\01042005\I396539D.raw

Output Set: N:\CRF4\01052005\I396539D.raw

```

158 <220> FEATURE:
159 <223> OTHER INFORMATION: Primer for generating point mutations in promoter sequence
160 <400> SEQUENCE: 16
161      caccuguuu uugcu                                     15
163 <210> SEQ ID NO: 17
164 <211> LENGTH: 16
165 <212> TYPE: RNA
166 <213> ORGANISM: Artificial Sequence
167 <220> FEATURE:
168 <223> OTHER INFORMATION: Primer for generating point mutations in promoter sequence
169 <400> SEQUENCE: 17
170      caccuugcu uuacu                                     16
172 <210> SEQ ID NO: 18
173 <211> LENGTH: 16
174 <212> TYPE: RNA
175 <213> ORGANISM: Artificial Sequence
176 <220> FEATURE:
177 <223> OTHER INFORMATION: Primer for generating point mutations in promoter sequence
178 <400> SEQUENCE: 18
179      caccuuguu uuacu                                     16
181 <210> SEQ ID NO: 19
182 <211> LENGTH: 16
183 <212> TYPE: RNA
184 <213> ORGANISM: Artificial Sequence
185 <220> FEATURE:
186 <223> OTHER INFORMATION: Primer for generating point mutations in promoter sequence
187 <400> SEQUENCE: 19
188      caccuuguu ucuacu                                    16
190 <210> SEQ ID NO: 20
191 <400> SEQUENCE: 20
W--> 192      000
194 <210> SEQ ID NO: 21
195 <211> LENGTH: 96
196 <212> TYPE: DNA
197 <213> ORGANISM: Artificial Sequence
198 <220> FEATURE:
199 <223> OTHER INFORMATION: Primer for generating flanking sequences of NS RNA to fuse
with the
200      coding sequence of the CAT gene
201 <400> SEQUENCE: 21
202      gttctttacg atgcgattgg gatatatcaa cggtggtata cccagtgatt tttttctcca 60
203      ttatgtcttt gtcaccctgc ttttgctgca gggcgt                                     96
205 <210> SEQ ID NO: 22
206 <211> LENGTH: 34
207 <212> TYPE: DNA
208 <213> ORGANISM: Artificial Sequence
209 <220> FEATURE:
210 <223> OTHER INFORMATION: Primer for generating flanking sequences of NS RNA to fuse
with the
211      coding sequence of the CAT gene
212 <400> SEQUENCE: 22

```

RAW SEQUENCE LISTING

DATE: 01/06/2005

PATENT APPLICATION: US/09/396,539D

TIME: 11:46:18

Input Set : N:\Crf4\01042005\I396539D.raw

Output Set: N:\CRF4\01052005\I396539D.raw

```

213      actgcatga gtggcagggc ggggcgtaat agat      34
215 <210> SEQ ID NO: 23
216 <211> LENGTH: 38
217 <212> TYPE: DNA
218 <213> ORGANISM: Artificial Sequence
219 <220> FEATURE:
220 <223> OTHER INFORMATION: Primer for construction of plasmid pIVACAT1
221 <400> SEQUENCE: 23
222      ctagatctat tacgccccgc cctgccactc atcgcagt      38
224 <210> SEQ ID NO: 24
225 <400> SEQUENCE: 24
W--> 226      000
228 <210> SEQ ID NO: 25
229 <211> LENGTH: 38
230 <212> TYPE: DNA
231 <213> ORGANISM: Artificial Sequence
232 <220> FEATURE:
233 <223> OTHER INFORMATION: Primer for generating flanking sequences of NS RNA to fuse
with the
234      coding sequence of the CAT gene
235 <400> SEQUENCE: 25
236      ctagatctat tacgccccgc cctgccactc atcgcagt      38
238 <210> SEQ ID NO: 26
239 <211> LENGTH: 97
240 <212> TYPE: DNA
241 <213> ORGANISM: Artificial Sequence
242 <220> FEATURE:
243 <223> OTHER INFORMATION: Primer for construction of plasmid pIVACAT1
244 <400> SEQUENCE: 26
245      ctagacgcc tgcagcaaaa gcaggggtgac aaagacataa tggagaaaaa aaatcactgg 60
246      gtataccacc gttgatatat cccaatcgca tcgtaaa      97
248 <210> SEQ ID NO: 27
249 <211> LENGTH: 96
250 <212> TYPE: DNA
251 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: Primer for construction of plasmid pIVACAT1
254 <400> SEQUENCE: 27
255      gttctttacg atgcgattgg gatatatcaa cgggtgtata ccagtgatt tttttctcca 60
256      ttatgtcttt gtcaccctgc ttttgctgca gggcgt      96
258 <210> SEQ ID NO: 28
259 <211> LENGTH: 30
260 <212> TYPE: DNA
261 <213> ORGANISM: Artificial Sequence
262 <220> FEATURE:
263 <223> OTHER INFORMATION: Primer for construction of pT3NAv
264 <400> SEQUENCE: 28
265      cggaattctc ttcgagcgaa agcaggagtt      30
267 <210> SEQ ID NO: 29
268 <211> LENGTH: 51

```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 01/06/2005
PATENT APPLICATION: US/09/396,539D TIME: 11:46:19

Input Set : N:\CrF4\01042005\I396539D.raw
Output Set: N:\CRF4\01052005\I396539D.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 20
Seq#:11; Line(s) 114
Seq#:12; Line(s) 123
Seq#:13; Line(s) 132
Seq#:14; Line(s) 141
Seq#:15; Line(s) 150
Seq#:16; Line(s) 159
Seq#:17; Line(s) 168
Seq#:18; Line(s) 177
Seq#:19; Line(s) 186
Seq#:21; Line(s) 199
Seq#:22; Line(s) 210
Seq#:25; Line(s) 233
Seq#:52; Line(s) 466
Seq#:53; Line(s) 475
Seq#:54; Line(s) 484
Seq#:55; Line(s) 493
Seq#:58; Line(s) 520
Seq#:59; Line(s) 529
Seq#:61; Line(s) 542

VERIFICATION SUMMARY

DATE: 01/06/2005

PATENT APPLICATION: US/09/396,539D

TIME: 11:46:19

Input Set : N:\Crf4\01042005\I396539D.raw

Output Set: N:\CRF4\01052005\I396539D.raw

L:6 M:270 C: Current Application Number differs, Wrong Format
L:192 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (20) SEQUENCE:
L:226 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (24) SEQUENCE:
L:278 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (30) SEQUENCE:
L:535 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (60) SEQUENCE: